

JL 195-2

Report of Investigations by Howard M. Fowler
Associate Mining Engineer, Territorial Department of Mines
in the Petersburg-Ketchikan Mining Precincts, Alaska
May 30 - August 1, 1948

July 1, 1948

May 30 - Juneau to Petersburg.

E. S. Hungerford of Petersburg who has been engaged in lapidary work has left Petersburg for Portland. It is believed to be permanent.

May 31 -

Earl Ohmer reports his Maid of Mexico (6 claims) is being^{K1-1-8} handled by Martin Jasper, 803 Arctic Building, Seattle, Washington. Mr. Jasper has maps, etc. of the property. Mr. Bidwell no longer has an interest in the property. Sole title rests with Mr. Ohmer. There is no activity at present at the property.

George Beckett reports he has staked one claim adjoining the claims of Jack Schoonover on Taylor Creek, Duncan Canal, Kupreanof Island. Mr. Beckett is in charge of C. A. A. installations at Indian Point and Petersburg.

Mr. Hicks, U. S. Commissioner, was absent from town and could not be contacted.

June 1 -

Went to Indian Point C. A. A. Station via C. A. A. boat M. S. Civair #1. Taken to Jack Schoonover property on Taylor Creek by M. S. Civair #1 and outboard.

June 2 - 3 -

Examined Schoonover property. The river was high due to considerable rain. Most of the ore showings are along the river which made proper sampling extremely difficult. Very little trenching

KX-117-29

has been done and Mr. Schoonover had no shovel at the property. Ten samples were cut of which four were check samples.

<u>Sple. No.</u>	<u>Location</u>	<u>Width</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>%Pb</u>	<u>%Zn</u>
HMF-1A	St. 2 - JCR Map	18"	0.02	1.40	0.9	3.0
HMF-1B	ditto	18"	0.01	1.20	0.5	1.4
" 2A	275' above St.5					
	JCR Map	2'	0.01	4.4	0.6	1.5
" 2B	ditto	2'	0.01	4.10	6.7	0.65
" 3A	170' above St.5					
	in Creek bed	Grab	0.04	2.6	1.1	2.1
" 3B	ditto	"	Trace	2.30	1.1	4.5
" 4A	10' from 3A & 3B in Stream					
	Bed	"	0.04	15.4	1.5	10.1
" 4B	ditto	"	Nil	9.30	1.9	7.2
" 5	On Beckett Claim (See survey)	"	Trace	0.6	0.6	10.2
" 6	St. 15, JCR Map	"	"	1.8	0.5	3.3

Several mineralized stringers 12 inches to 3 feet wide and with true north strike joined the acid dike on the north side along the river.

Further mineralization is evident on the hill several hundred yards to the north. Mr. Schoonover plans to further prospect the area and in my opinion it is fully justified.

June 3 - Evening - Taylor Creek to Indian Point.

June 4 - Indian Point to Petersburg.

Contacted Mr. Hicks, U. S. Commissioner. Isaac and Henry Katase have located 10 lode claims (called Katase Lode Group) approximately 3 miles west of Portage Bay, Kupreanof Island. I was unable to determine the nature of the claims or the plans of the Katase's as they were fishing at the time.

June 5 - Petersburg to Ketchikan.

June 7.

To Moth Bay to look over zinc-copper property. This property has already been examined and sampled by the U. S. Bureau of Mines. My inspection was made to familiarize myself with a major mineral occurrence of the area. Aner Erickson and associates

reportedly have an option on the property from Mr. Bushman of Seattle, present owner of the property. The Fairbanks Mining Corporation has reportedly staked over these claims under the assumption that the original claims were not correctly staked. However, the Moth Bay claims are patented claims so the Fairbanks Mining Corporation staking cannot be valid.

June 8 - Ketchikan Air Service weathered in.

June 9 - To Mahoney Mine, George Inlet.

At the time of the writer's visit, two men were actively engaged at the operation. One man handled mill duties and the other took care of the mine. A woman and two small children - family of one of the men - were also present at the property.

The operation was milling but not steadily. Aner Erickson is still in charge of the property but, according to the crew, he seldom visits it.

Safety conditions are unsatisfactory in both the mine and mill. There are no stulls in stoped areas. Stopes are open from drift to surface and no protection has been provided to prevent loose rock from falling on men in drift. There are no guard rails around head of mill and footing there is often slick and treacherous. This is true around both the crushing unit and the grizzly at the mill head.

The mill has numerous shafts, bolts, and pulleys exposed. This, together with numerous holes and steps in the mill floor, constitute a definite hazard. Recommendations for the elimination of all these hazards were made to the crew at the mine and to Aner Erickson in town. In neither case did the writer receive any satisfactory response. These recommendations are essentially the same as made by J. C. Roehm in 1947, but have been totally disregarded.

Since this inspection, this property has been taken over by Arthur Theis and associates who have been engaged in development at the Rush and Brown Mine. Mr. Erickson still retains a small interest.

Immediate plans are for the construction of a larger camp and mill. Mine development apparently will be done last. This is in spite of the fact that Mr. Erickson has very little developed ore in sight.

June 10 - Return from Mahoney Mine.

Out one sample (HMF #10) at Surprise Claim on 6 foot

quartz outcrop. Very little mineralization was evident. The vein had a dip of 63° to the northwest and a strike of south 60° west and outcrops at the mouth of a short tunnel. There is no present owner.

<u>Spls. No.</u>	<u>Width</u>	<u>oz. Au</u>	<u>oz. Ag</u>	<u>% Pb</u>	<u>% Zn</u>
HMF #10	6'	Nil	0.60	0.2	0.1

A grab sample (HMF #11) was taken on some iron stained slide rock one fourth mile south of the surprise claim.

<u>Spls. No.</u>	<u>Width</u>	<u>oz. Au</u>	<u>oz. Ag</u>
HMF #11	Grab	Trace	Nil

June 11 - Made arrangements for Prince of Wales Island examinations.

June 12 - Left for Chalmers Sound, Prince of Wales Island, aboard boat Salmon Bay with Jim Picher, George Roberts, and George Roberts family.

June 13 - Examined George Roberts claim called Polymetal Lode on South arm of Chalmers Sound. The Polymetal Lode is a zinc-lead prospect staked in May, 1947 by Mr. Roberts, of Ketchikan.

The ore zone is an impregnation of sediments with sulfides. Insufficient trenching has been done to delimit the orebody. The ore outcrops at about 780 feet elevation and is about 20 feet wide. It disappears to the south under a major slide area. It is traceable to the north for about 100 feet. A tunnel was started at the 500 level and driven for about 294 feet but did not intersect the ore. A Brunton compass - Paulin Altimeter survey indicated that the tunnel should be advanced for about 200 feet more in order to X-cut the orebody. However, the altimeter was not in good adjustment so the survey cannot be considered accurate. Four samples were cut on the outcrop.

<u>Spls. No.</u>	<u>Width</u>	<u>oz. Au</u>	<u>oz. Ag</u>	<u>% Pb</u>	<u>% Zn</u>
HMF-12	10'	Nil	Trace	5.2	13.2
HMF-13	10'	Nil	Nil	1.1	9.05
HMF-14	20'	0.01	Nil	0.3	2.2
HMF-15	Grab	0.01	0.50	3.1	21.1

These assays are encouraging and if Mr. Roberts does any added trenching and development work, a further examination and re-survey will be warranted. A report has been written on the property and a copy sent to Mr. Roberts.

June 14 - Outboard motor refuses to operate. Rowed to Moonshine mill site on south arm of Chalmers Sound.

June 15 - Went to Moonshine property. The trail is completely overgrown for most of its length. All bridges are either down or completely rotten. The tunnel portal (elevation 2200') was completely filled with snow so that entrance into the tunnel was not possible. On top of the ridge back of the tunnel and at an elevation of 2400', a shaft has been sunk on a well defined fissure containing principally galena with quartz, siderite, and calcite. The fissure traverses a limestone over part of its distance and the orebody is locally apparently a replacement body in the limestone. It was not possible to do much investigating around the shaft as I was alone and shaft timbers were not in very good shape. Depth of shaft was undetermined.

Shortly after the writer's visit to this property David and Bert Sweetser, sons of a former Alaska mining operator, came to Alaska for the express purpose of examining the Moonshine property. They dropped their supplies from the air, lost most of them, and as a consequence did not stay at the property long. However, they reported that they had done some work in the shaft and had exposed a small amount of ore. They reported that they descended 72 feet down the shaft but did not reach shaft bottom. Samples they showed the writer were solid galena of about one quarter pound size. One small piece assayed 17 ounces silver.

The Sweetser's staked the property but it is doubtful if they will return to work it. They stated they had been mining in the Mohave Desert in California and did not think much of operating conditions as they saw them in Alaska.

June 16 - Outboard motor still refuses to run. Rowed to Art Settle's logging camp at mouth of Dora Bay. On Divide Head, Chalmersdeley Sound, quartz float containing chalcopryite was found. The area was considerably cut with quartz stringers but none ^{were} found to contain chalcopryite. The float was assayed.

<u>Sp. No.</u>	<u>Width</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>% Cu</u>
HMF-16	Float	Trace	0.70	2.92
HMF-17	Float	Nil	Trace	2.02

June 17 - Examined Oregon-Idaho property on Dora Lake. Portal of tunnel was caved but entry was possible. Water had backed up behind the fill but a trench was dug to drain the impounded water. The property was surveyed and samples cut. However, the best ore had

apparently been stoped out. The shaft was flooded and access to lower workings was not possible.

<u>Spls. No.</u>	<u>Width</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>% Pb</u>	<u>% Zn</u>	<u>% Cu</u>
HMF-18	7'	0.01	0.40	0.02	2.6	0.04
HMF-19	6'	0.02	0.40	0.01	1.2	-
HMF-20	5'	0.36	Trace	2.5	8.23	-
HMF-21	Grab 3'	0.14	1.00	1.5	24.1	0.64

June 18-19 - Attempted to flag plane.

June 20 - Returned to Ketchikan to change outboard motors.

June 21 - Obtained motor.

June 22 - Returned to Chalmersdeley Sound.

June 23 - Left for Dolomi (4:00 A. M.)

Sampled quartz stringer one half mile north of Wedge Island. Stringer varied from 6 inches to two feet wide. The stringer was on the beach and was submerged at high tide. One sample was cut.

<u>Spls. No.</u>	<u>Width</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>
HMF-22	6"	0.01	0.40

Arrived Dolomi Mine. Heinie Twost was in charge. Only seven men were at the property. Arner Erickson was no longer connected with the company.

The tram line from the beach is rotting badly and is not safe for transporting heavy loads. At the time of the writer's visit the company was not operating due to a shortage of water for generating power. An attempt was being made to dewater the mine but the pump size was too small to dewater more than the first level.

Later, in a talk with Robert Crowe-Swords of Vancouver, B. C., who is backing Dolomi, Mr. Crowe-Swords stated that he now planned to construct a road to the property and eliminate the surface tramway. This will require about two miles of road. Mr. Crowe-Swords also stated that he intended to install a diesel on the beach to generate power for dry periods of the year when water is low.

June 24 - Left Dolomi for Niblack. Weather stormy and waves high. Lay to in cove.

June 25 - Arrived at Niblack. Buildings are all down. The shaft is flooded and is partially caved. Small pieces of hematite were found on the dump. No samples were taken. Left Niblack for Kassan. Weather stormy and waves high. Lay to in cove. KX-119-153

June 26. - Lay to in cove most of day. Weather stormy. Waves quieted down slightly toward evening so started up coast. Received tow from fishing boat. Arrived at Grindell Island about 1:00 A. M., June 27.

June 27 - Leave for Kassan. Looked over Rich Hill Mine. This property has been examined and surveyed previously so the visit was confined to a general inspection. All tunnels are still open. A small amount of copper ore is in sight. However, the aerial tramway is down. Bunkhouses and buildings are still standing. Fred McKay is the owner. Mr. McKay states that he hopes to work on the property within the year. KX-119-59

Arrived at Kassan.

Kassan to Coal Bay.

June 28 - Happy Montplaisure was unable to show me the coal seam outcrop until later.

Coal Bay to Clark Bay. Looked for tunnel at Stella Prospect. Could not locate the tunnel but a ten inch outcrop to the vein was found. The outcrop located was about 1/4 mile from the beach in the bed of a stream and at an elevation of 440 feet. The vein is a quartz porphyry in slate. At its outcrop, it has a strike of N. 45° W. and a dip of 80° NE. Locally, it lies in the plane of the country rock. Small amounts of galena, sphalerite, and pyrite could be seen scattered throughout the quartz. One sample was cut. KX-119-77

<u>Sample Number</u>	<u>Width</u>	<u>Oz. Au</u>	<u>Oz. Ag</u>	<u>% Pb</u>	<u>% Zn</u>
HMF-23	10"	0.02	0.60	1.2	2.6

Clark Bay to Hollis.

June 29 - Inspected Wendell Dawson mine on Harris Creek. Mr. Dawson had some difficulty this spring with his aerial tramway breaking but it is now repaired and operating satisfactorily. At the time of my visit, the property was operating with four or five cars a day being milled. Mr. Dawson's wife, small daughter, sister, and young nephew were at the property. Mrs. Dawson and Mr. Dawson's sister took turns operating the mill while Mr. Dawson worked the mine. Mr. Dawson KX-119-8

expects to mill for approximately 100 shifts during 1948.

Craig 119
The ore structure at the Dawson mine is too flat lying for broken ore to flow freely in the stope. The foot wall is smooth and unbroken but the hanging wall is badly fractured. Mr. Dawson insists on opening too much ground in his stopes without proper support. He was advised against this but still continues to mine in the same way. There is considerable danger that his hanging wall will start to cave and that his present stope may be lost.

Mr. Dawson reported existence of two narrow (4" to 6") veins on the summit of the mountain on which he is located. He reports several samples were cut and went over one hundred dollars in gold a ton. The mountain was fogged in and the summit was still covered with snow so no investigation was made. (

June 30 - Dried out gear in P. A. F. cabin and over-hauled out-board motor.

July 1 - Hollis to Salt Chuck. KX-119-1

At the time of arrival, the property was being shut down. Arthur Theis and his associates were forming the Montana Lead and Zinc Company with a view to taking over the major interest of the Mahoney Mine on George Inlet.

Craig 119
The approximate 6,000 feet of road from mine to mill was completed but neither the mine or mill is in condition to operate. The writer was informed that the reason for leaving was because of disagreement with Lee and Guy Howard, owners of the property, and not because of any lack of orebody.

July 2 - Arrived at Coal Bay. Happy Montpleasure showed me a small seam of lignite exposed on the left bank of Big Coal Bay stream and about 1/4 mile from the beach. The seam averages about 10 inches thick and dips about 12 degrees to the north. It has an extremely high ash content. Specimens of the coal refused to burn until thoroughly washed and dried. The seam was underlain by a slate. Above the seam was 6 to 8 feet of a poorly consolidated sandstone. There is from 5 to 50 feet of overburden above the sandstone. On exposure to the air and drying, the sandstone was noted to disintegrate. Approximately one half mile to the east, the slate and sandstone were again exposed in a stream bed but no coal was found in association with them. The coal seam has no economic importance. The sandstone has no importance at present but may have some local importance for limited uses in the future.

July 3 - To Kassan. Talked with John Bufers regarding prospects of interest. Bufers requested examination of his "Copper King Prospect" at Trocadero Bay. May examine later.

Returned to Ketchikan via Fred McKay.

July 4 - Returned skiff to Herring Cove. Overhauled outboard motor and returned in afternoon.

July 5-8 - At Ketchikan.

July 9 - To Lime Point (Barite)

July 10 - Looked for reported barite occurrence on Lime Point. Searched point thoroughly but did not locate any barite. In a draw on the east side of the peninsula and about 100 feet from the beach an outcrop of quartz about 6 feet across in the north-south dimension, and 8 feet across in the east-west dimension is exposed. Its dimensions are increasing with depth. The quartz is clean, contains no impurities and no mineralization.

July 11 - Lime Point to View Cove, Dall Island.

Examined Permanente Limestone Quarry. Mr. David Gray is in charge of the operation. An employment of 18 were reported at the property, broken down as follows:

- 1 Superintendent - Daniel Gray
- 1 Bookkeeper and nurse - Mrs. Garretson
- 1 cook
- 2 mill
- 2 ore train
- 2 churn drills
- 2 power shovel
- 3 quarry
- 2 powerhouse
- 2 blacksmith shop

Normally, the operation of the property requires about 25 men but less were required for 1948 because of the excellent fragmentation of a series of shots in the fall of 1947. The property operated for 8 months in 1947, and mined 219,000 tons of limestone. It was crushed to a minus inch and a half and shipped on company boats to the Diamond Division of Permanente Cement Company in Seattle. It is planned to operate until the first of December during 1948.

Safety conditions in the quarry, mill, wharf, and powerhouse appeared to be good. A radiophone was at the property and a trained nurse was present at all times.

View Cove to Ketchikan.

July 12 - 14 - At Ketchikan.

July 15 - To Humpback Lake, Boca de Quadra, for Eugene Wacker claim examination. Mr. Wacker believes he has located a body of carnotite near Humpback Lake. The trip was made with Palmer Stewart who had previously visited the property with Mr. Wacker.

July 16-18 - From Humpback Lake to Wacker claims and return.

Ketchikan 120
The Wacker claims are reached by following up a stream that empties into the north side of Humpback Lake (elevation 350') about one fourth mile from the upper end. The stream is followed about three fourths of a mile to the top of the ridge (elevation 2460'). The supposed carnotite outcrops about three fourths of a mile to the north east and on the north side of the ridge top at an elevation of 2710 feet. The outcrop is about half way down a several hundred foot sheer cliff face. Every effort was made to secure a sample from the outcrop but it was impossible. Therefore, the only samples obtained were float samples from the draw below the outcrop. These appeared to be limonite stains on diorite. However, several pieces were taken to the Ketchikan Assay Office for testing. None, however, contained any radioactive material.

July 19-20. - Weathered in at Humpback Lake. No plane.

July 21 - Return to Ketchikan.

July 22 - To Silvas Lake for safety inspection of Ketchikan Water Power Tunnel.

Ketchikan 120
A contract, amounting to \$40,330.00 was given to Arne Erickson by the City of Ketchikan for the purpose of completing the break-through of the Silvas Lake Tunnel into Silvas Lake. The contract was awarded on June 17, 1948, and Mr. Erickson promised completion of the tunnel by October 15, 1948.

At the time of the inspection, Mr. Erickson was driving a 40-foot break-through tunnel from No. 2 raise in order to lower the lake about 15 feet. Fifteen feet of this tunnel was already complete. Two more rounds of 6 feet each and one long round with 9 foot back holes and 15 foot lifters for the break-through were planned. Mr. Erickson then planned to drive a 42 foot 70° raise from the main tunnel for an additional break-through there. In this manner, Mr. Erickson proposes to lower the water in stages until the lake is lowered to the desired level. This method calls for at least five separate break-throughs.

Mr. Erickson requested the writer's opinion on the work prior to his bid for the job and prior to the writer's joining the Department of Mines. A method was suggested and rejected by Mr. Erickson on the grounds that he was unfamiliar with that type of work. At the time of the inspection, the writer's method was again suggested and again rejected. Since Mr. Erickson was apparently conducting his work in a safe manner, no further comment was made.

Periodic inspection trips to this job were made.

It was recommended to Mr. Erickson that he place a guard rail around his surface excavation to eliminate the hazard of a serious fall. Mr. Erickson assured the writer that it would be taken care of. In other respects, the job apparently was being conducted in a safe manner.

The crew employed at the job consisted of five miners, one compressor man, 1 cook and Arner Erickson.

Periodic inspection trips to this job are recommended.

July 23 - Return from Silvas Lake.

July 24-26 - In Ketchikan.

July 27 - To Line Point (Barite).

After obtaining further information on the location of the barite deposit and at the request of B. D. Stewart, Commissioner of Mines, this second trip was made.

This deposit, called the Barium Lode, was part of the Gertrude Sulzer estate and is now owned by William Sulzer of Seattle, Washington. It consists of one patented claim lying near the most southerly end of the peninsula between Hetta and Nutkwa Inlets, Prince of Wales Island, Alaska.

The deposit is apparently a small replacement deposit of white crystalline barite with no visible impurities lying in a semi-crystalline, blue-weathering, white limestone. It appears to be a nearly vertical tabular deposit with a generally northerly strike. It contains an estimated tonnage above low tide of about 4,300 tons. It extends under the water on the south end. Its depth has not been determined. There are about 35 feet of tunnel and 30 feet of open cuts on the property. A whiteish appearing reef several hundred yards to the southwest was investigated and found to be limestone. A report has been written and maps drawn on this property, and are on file in the Department of Mines' files.

July 28 - Line Point to Moonshine Lead Property.

A return was made to this property because the Sweetser's reported the shaft and tunnel now open.

July 29 - The tunnel at the Moonshine property is badly caved in in several places. It is not possible to reach the tunnel face but the Sweetser's state that it does not cut the ore structure.

The Sweetser's did not leave the shaft in suitable shape for anyone to risk going down without assistance from above. However, it could be seen that the Sweetser's had removed some of the shaft logging in order to examine exposed ore structures.

This property is known to contain some good ore. A suitable departmental report and map has never been worked out probably because of the present condition of the workings. It is recommended that such a report be prepared, if possible, before this property becomes completely inaccessible.

July 30 - From Moonshine to Miller (Mineral) Lake to locate a 24-inch vein of galena reported by Eugene Wacker.

July 31 - Mr. Wacker reported a 24-inch vein of galena on the east side of Dora Lake and about one-fourth mile from the head. The vein was reported cut by a tunnel about one-fourth mile from the lake. Large pieces of galena float were reported in the stream bed below the tunnel.

On investigation, the tunnel was located. It had been driven for 65 feet on a strike of N. 85° W. and an elevation of 220 feet. An 8-foot cross-cut was driven to the right at 45 feet from the portal. No ore was cut at any place in the tunnel. No galena was found in the stream below. About 60 feet above the tunnel an outcrop about 10 feet wide was found that contained minute specks of galena and fair amounts of sphalerite. Pyrite and chalcoppyrite was also noted.

This outcrop is in line with and is probably a continuation of the Lady of the Lake vein. Two samples were cut.

Sample No.	Width	oz. Au	Oz. Ag.	% Pb	% Zn	% Cu
HMF-27	10'	0.04	0.20	1.80	7.7	0.03
HMF-28	Grab	0.06	0.50	Nil	17.45	-

August 1 - Miller Lake to Ketchikan.